HOMOHARRINGTONINE

NSC - 141633

Chemical Name: Cephalotaxine, 4-methyl 2-hydroxy-2-(4-hydroxy-4-methylpentyl) butanedioate (ester), [3(R)]-

Molecular Formula: C₂₉H₃₉NO₉ M.W. 545.6

Stability:

Bulk:

Room temperature and 60 °C stability studies indicate the chemical to be stable for at least 30 days (HPLC).

Solution:

Room temperature stability studies for homoharringtonine (1 mg/mL) in 10% ethanol showed 16% decomposition after 24 hours and 35% decomposition after 96 hours (HPLC).

Ultraviolet Absorption:

(Methanol)

$$\lambda_{max} = 291 \pm 2 \text{ nm}$$

 $\varepsilon = 4,000 - 4,250$

High Performance Liquid Chromatography:

Column:

Waters RCM C₁₈ cartridge

Mobile Phase:

MeOH/water/NH₄OH (75/50/3)

Flow Rate:

3 mL/min

Detection:

UV at 280 nm

Sample Preparation: 1 mg/mL in methanol or internal

standard solution

Internal Standard:

strychnine (30 mg/25 mL of MeOH)

Retention Volume:

12.0 mL (NSC-141633)

5.2 mL (I.S.)

Toxicity Data:

Mouse(ip): LD₅₀: 1960 μg/kg

Chinese Medical Journal, 92,175,(1979)

Mouse(ip): LD₅₀: 6.5 mg/kg

Journal of Applied Toxicology,6,270(1986)